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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Yoshinari Endo

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EXAMINER

VAUGHAN, MICHAEL R

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/588,238	Applicant(s) ENDO ET AL.	
	Examiner MICHAEL R. VAUGHAN	Art Unit 2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 16, 17 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 16, 17, and 20-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on **6/17/09** has been entered.

Claims 10-15, 18 and 19 have been canceled. Claims 1-9, 16, 17, and 20 have been amended. Claims 21 and 22 have been added. Claims 1-9, 16, 17, and 20-22 are pending.

Response to Amendment

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9, 16, 17, and 20-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 1 and 16, the last limitation is indefinite for a number of reasons. First, the term "image data" is indefinite because it is unclear whether it refers to input image data, copied image data, or some third image data. For purposes of examination, this term will be interpreted as copied image data. This same limitation recites, that this indefinite image data is obtained by removing the digital watermark information from the input image data. The function of removing is indefinite. It appears the claim is directed to inputting a new watermark into a copy of the original input digital watermark. If the original is a printed medium, it is unclear how the watermark could be removed from the original. Another interpretation is that 'removing' means that the original watermark is replaced by the new watermark when a copy is made. If this is the intended scope, then removing is not the best verb to use. It is unclear whether or not the original input image data is being altered by this process and in what form the new watermark is placed into the new copied digital watermark. The dependent claims are likewise rejected for at least the same reasons. Appropriate correction is required.

Response to Arguments

Applicant's arguments with respect to claims 1 and 16 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5, 6, 16, and 20-22 are rejected under 35 U.S.C. 102(e) as being anticipated by USP 6,757,405 to Muratani et al., hereinafter Muratani.

As per claim 1, Muratani teaches a digital watermark information processing apparatus comprising:

an image acquisition component which acquires input image data from a printed medium [DVD is a medium printed with lasers] in which digital watermark information is embedded (col. 34, lines 21-25);

an extracting component which extracts the digital watermark information from the input image data (col. 34, lines 31-35); and

a digital watermark information modification component which generates new digital watermark information by modifying the digital watermark information when the digital watermark information complies with a predetermined finite copy condition stored in the digital watermark information (col. 34, lines 25-30), and generates copied image

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data by embedding the new digital watermark information into the input image data or image data obtained by removing the digital watermark information from the input image data (col. 34, lines 35-39).

As per claim 2, Muratani teaches said digital watermark information contains copy control information for limiting an allowable number of times the input image data is copied (col. 34, lines 25-30); and

when determining that the copy control information contains a variable value representing permission to copy the input image data, said digital watermark information modification component generates the new digital watermark information [new copy control information] by modifying the variable value and generates the copied image data (col. 34, lines 35-39).

As per claim 3, Muratani teaches said digital watermark information modification component determines that the copy control information contains the variable value representing permission to copy the input image data when the variable value is within a predetermined range [copy-enabled for predetermined numbers; col. 34, lines 26-30).

As per claim 5, Muratani teaches a recording component which stores the digital watermark information extracted by said extracting component (col. 34, lines 31-33), wherein:

when determining that the digital watermark information contains a flag value representing image data of an original file and the same digital watermark information is not stored in said recording component, said digital watermark information modification

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component generates the new digital watermark information [new copy control information] to write the generated new digital watermark information into the recording component and generates the copied image data (col. 34, lines 35-39);

when determining that the digital watermark information contains a flag value representing the image data of an original file and that the same digital watermark information is stored in said recording component, said digital watermark information modification component modifies the variable value [rewrites the copy control information] that is contained within the digital watermark information stored in said recording component, and generates the new digital watermark information and the copied image data (col. 34, lines 35-39); and

when determining that the digital watermark information contains a flag value not representing the image data of an original file, said digital watermark information modification component does not generate the copied image data (copy-disabled; col. 34, lines 28).

As per claim 6, Muratani teaches determining that the digital watermark information contains a flag value representing image data of an original file, said digital watermark information modification component generates the new digital watermark information [new copy control information] by changing the flag value [rewriting copy control information] to a value not representing image data of an original file, and generates the copied image data [case of copy-once; copies would have copy-disabled value; col. 34, lines 35-39].

As per claim 16, Muratani teaches a digital watermark information processing method comprising the steps of:

(a) acquiring input image data from a printed medium in which digital watermark information is embedded (col. 34, lines 22-25);

(b) extracting the digital watermark information from the input image data (col. 34, lines 32-33);

(c) determining whether or not the extracted digital watermark information complies with a predetermined condition (col. 34, lines 25-30); and

(d) generating new digital watermark information by modifying the digital watermark information when it is determined in said step (c) that the digital watermark information complies with said predetermined condition, and generating copied image data by embedding the new digital watermark information into the input image data or image data obtained by removing the digital watermark information from the input image data (col. 34, lines 35-39).

As per claim 20, Muratani teaches the new digital watermark information is embedded to the printed medium as a background pattern (col. 34, lines 16-20 and 26).

As per claims 21 and 22, Muratani teaches the predetermined finite copy condition is modified with the generating the copied image data to allow a finite number of copies of the image data (col. 34, lines 29-30 and 36-37).

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 7-9, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muratani in view of USP 6,664,976 to Lofgren et al., hereinafter Lofgren.

As per claims 4 and 17, Muratani is silent in disclosing a digital watermark information modification component modifies the variable value by a smaller amount with a higher level of access authorization of a user, and modifies the variable value by a larger amount with a lower level of the access authorization level of a user. Lofgren teaches a digital watermark information modification component modifies the variable value by a smaller amount with a higher level of access authorization of a user, and modifies the variable value by a larger amount with a lower level of the access authorization level of a user (col. 9, lines 1-25). Lofgren, which uses a granular access method to protected content, teaches that users must meet certain authentication levels in order to access such content. Lofgren uses bits in the watermarking to differentiate between access levels. There is obvious some type of an order whereby only users with the most clearance can access all the content. On the contrary, users with low clearance can only access the less classified content. Such a teaching, obviously benefits Muratani's system in which really the only two types of protection for the

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content is the number of copies. The use of known technique to improve similar devices in the same way is obvious to one of ordinary skill in the art. The claim would have been obvious because the technique for improving watermarking copy prevention was part of the ordinary capabilities of a person of ordinary skill in the art at the time of the invention, in view of the teaching of granular user access levels in Lofgren.

As per claim 7, Examiner supplies the same rationale for combining Lofgren granular user access levels within the system of Muratani as recited in the rejection of claim 4. Muratani teaches said digital watermark information modification component can provide the copied image data having the same digital watermark information as that of the input image data, without generating the new digital watermark information [user level would provide the copy-enabled case thus producing legal copies; col. 34, lines 28-30].

As per claim 8, Muratani is silent in disclosing digital watermark information modification component generates the new digital watermark information by adding personal identification information of a user to the digital watermark information. Lofgren teaches digital watermark information modification component generates the new digital watermark information by adding personal identification information of a user to the digital watermark information (col. 4, lines 40-50 and col. 9, lines 64-67). Examiner relies upon the same rationale for combining the teachings of Lofgren with the teachings of Muratani as a means to improve on the system of Muratani as cited in the rejection of claim 4.

As per claim 9, Muratani is silent in disclosing digital watermark information modification component generates the new digital watermark information by adding identification information of a system to the digital watermark information, said digital watermark information processing apparatus is integrated in said system. Lofgren teaches digital watermark information modification component generates the new digital watermark information by adding identification information of a system to the digital watermark information, said digital watermark information processing apparatus is integrated in said system (col. 4, lines 40-50). Examiner relies upon the same rationale for combining the teachings of Lofgren with the teachings of Muratani as a means to improve on the system of Muratani as cited above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL R. VAUGHAN whose telephone number is (571)270-7316. The examiner can normally be reached on Monday - Thursday, 7:30am - 5:00pm, EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. R. V./
Examiner, Art Unit 2431

/William R. Korzuch/
Supervisory Patent Examiner, Art Unit 2431